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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,006	12/30/2003	Ellen Lasch	37355-169	8389

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EXAMINER	
MAI, THIEN T	

ART UNIT	PAPER NUMBER
2887	

MAIL DATE	DELIVERY MODE
01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/749,006	LASCH ET AL.	
	Examiner	Art Unit	
	Thien T. Mai	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement

Amendment filed by applicants 10/23/2007 is hereby acknowledged.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/2007 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim(s) 1-14, 18-20, 22, 27-28 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453) in view of Roberts (6025283) further in view of Robinson et al. (US 20030047253) and Fisher et al. (US 5,569,898)

Conner discloses a card comprising: a first layer of metal position at bottom of the transaction card (Specification par. 0011);

a recordable medium for storing information such as a chip **11** (Fig. 1) circular disk (Fig. 27-29) or magnetic strip affixed to the back the card (Specification par. 0011), inherently implies being disposed on the first layer of the metal card;

a second plastic layer comprising of two layers upper and middle (Specification par. 0011), adjacent and laminated to the metal layer (Specification par. 0079), which is made of PVC (Specification par. 0070), known in the art as thermoplastic polyvinyl material

wherein the metal layer is made of titanium (Specification par. 0076) or 300 series stainless steel (Specification par. 0070, 0076), which is on the bottom (Specification par. 0011) of the card and thus provides a surface for the transaction card.

Conner does not suggest the first metal layer to comprise embossed characters.

Roberts discloses a card having a precious metal layer such as gold. Roberts doesn't expressly mention precious metals include titanium; however, titanium is known for its expensiveness and is therefore considered a precious metal. The characters representing account numbers and/or name are embossed onto the metal layer of 200 microns thick (or 7.874 mils) (col. 4 lines 1+), which is done by mechanical technology or laser etching techniques (col. 4 lines 42+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roberts to the metal layer of Conner since the incorporation would prolong the information embossed on the metal layer.

The metal layer of Roberts containing the embossed characters is 200 microns which is 7.874 mils; however, Roberts is silent with respect to the metal layer is of at least 8 mils. It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that by mere scaling/changing the layer from 7.874 mils to 8 mils is not sufficient to distinguish from prior art unless the claimed invention perform differently. See In *re Rose* , 220 F.2d 459, 105 USPQ 237 (CCPA 1955); In *re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); In *Gardner v. TEC* Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984). Roberts is further silent with respect to a layer of metals of at least 8 mils capable of being embossed. Robinson et al. discloses it is well known in the art to emboss sheet of metal including stainless steel and titanium that is at least 8 mils (paragraphs 8-9, 24, 28, 35, 47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Robinson et al. in order to obtain an embossed metal layer of at least 8 mils as desired and to be measurable by devices that only use mils as measuring unit.

Roberts is silent with respect to the embossed characters in the metal layer disposed in the portion that is thinner than the remainder of the first layer of metal.

Fisher discloses a card having embossed characters disposed in a portion (before being embossed) of the card that is thinner than the portion(s) at least having magnetic strip embossed characters thereon (Fig. 1-3, col. 4 lines 19+)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Fisher so that different

thickness regions of the card are verified for compliance with ISO standard and/or for fraudulent forgery.

Regarding claim(s) 9 and 13, Conner discloses the magnetic strip is affixed to the back of the card, inherently implies the affixation is adjacent to the metal layer. Conner further mentions an affixation is accomplished by glue (Specification par. 0072), which inherently implies an adhesive layer being deposited already in order to glue/affix the stripe.

Regarding claim(s) 10, 12, and 14, Conner discloses all layers of the transaction card can alternately be made all of titanium layers or alloys or other metals (Specification par. 0076). As the result, the middle layer 33 or 6, interpreted as being the first layer of metal, is adjacent to the bottom being the second layer of substrate and the second layer is already proven in claim 9 for having an adhesive layer onto which the magnetic stripe is affixed (see discussion regarding claim 9).

Regarding claim(s) 20, Conner discloses the metal layers further include a cavity in which a chip **11** is embedded (Fig. 12).

Regarding claim(s) 22, Conner discloses the layers making up the transaction card can alternately be made all of titanium layers or alloys or other metals (Specification par. 0076) and the thickness of the card is desired to be compliant with ISO-7816 standard thickness of .031 inches (or 30 mils) (Specification par. 0068-69). Accordingly, the total thickness of the metal layer of the card in this embodiment is about 30 mils thick.

Re claim 27, Conner teaches the metal layers have a opening for receiving a chip 11.

3. Claim(s) 15-17 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283) and Robinson et al. (US 20030047253) and Fisher et al. (US 5,569,898), further in view of Kaminsky (20040121257).

Regarding claim(s) 15-17, Conner discloses all limitations set forth in this claim as discussed above, except a surface coating that is made of pholyethylene terephthalate material and comprises a dye for providing color to the card. Kaminsky discloses a transaction card with a metal layer 16 coated on the surface with a colored dye donor layer made of polyethelene terephthalate (Specification par. 0078, 0091).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the color dye of Kaminsky into Conner's invention with the motivation for the desire for manufacturing cards with different colors for different financial institutions.

4. Claim(s) 21, 29 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283) and Robinson et al. (US 20030047253) , further in view of Hinata (20030202151).

Regarding claim(s) 21, Conner discloses all limitations set forth in this claim as discussed above, except an oxide layer on a surface of the metal layer being formed from an anodizing process. Hinata discloses such technique is known in the art. See reference text below:

> "The insulator 66 is fabricated of tantalum oxide (Ta.sub.2O.sub.3) that is obtained by oxidizing the first metal layer 65 through anodizing. When the first metal layer 65 is anodized, the surface of the first layer 79a of the line wiring 79 is also oxidized. Similarly, a second layer 79b fabricated of tantalum oxide is thus formed." (Specification par. 0133)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize anodizing technique to achieve bonding thus preventing the metal layer from peeling off.

5. Claim(s) 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283) and Robinson et al. (US 20030047253) and Fisher et al. (US 5,569,898), further in view of Makishima (3468046) and Biller (20030150762). The teachings of Conner/Roberts have been discussed above.

Regarding claim(s) 23, Roberts discloses a card having a recessed pocket from which embossed characters are protruded by the embossing process so that the thickness of the card conforms with ISO standard thickness. See the following text:

> "Advantageously, to conform with ISO standards, the card can be milled out to provide a recess of 600 micron to accommodate SMART card technology and can thereafter be embossed." (col. 4 lines 46-49)

Conner-Roberts combination still fails to teach or reveal a filler panel being disposed within the pocket. However Makishima discloses card having a light filter 3 with translucent film 4, made so that the signature is invisible light in the visible

spectrum but visible under ultraviolet light, is inserted to fill the pocket having indicia such as character signature in it (col. 3 lines 33-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use a fill panel such as of Makishima with the motivation for the desire for further security for the transaction card.

Regarding claim(s) 24, Conner-Roberts-Makishima together still fails to teach an adhesive layer being disposed within the pocket to adhere the fill panel covering indicia. However, Biller discloses a label, interpreted as the fill panel, is used to adhere using adhesive material and cover indicia on the card (see Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention use a fill panel such as of Biller's to cover indicia such as account number or signature area for security protection purposes.

6. Claim(s) 25 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner (20050194453), modified by Roberts (6025283) and Robinson et al. (US 20030047253) and Fisher et al. (US 5,569,898), further in view of Hara (US Patent 4,876,441, Hara'441 hereafter). The teachings of Conner/Roberts have been discussed above.

Regarding claim(s) 25, Conner discloses all limitations set forth in this claim as discussed above except for the transaction card to have chamfer edges around the perimeter of the card. Hara'441 discloses chamfering edges are provided around the perimeter for protection of the core portion which houses peripherals (col. 11 lines 11-35, Fig. 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to be motivated to utilize Hara's invention to further protect the electronics inside such as chip and to avoid incidents caused by sharp and non-chamfered edges.

Remarks

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. The Examiner agrees with applicants that the previously cited reference do not teach the currently amended limitation in which the "embossed characters in the metal layer disposed in the portion that is thinner than the remainder of the first layer of metal". However, upon updated search, the Examiners undersigned found that reference Fisher et al. discussed above teaches a view in which different thicknesses of layers of the card are being checked for compliance and/or validity.

The Examiner further notes that the previous Office Action contains a typographical error in citing the metal layer of 600 micron being 7.874. Upon re-reading of the reference Roberts, it is found that it should be 200 micron (col. 4 lines 4-5) which is equivalent to 7.874 mils; thus, Applicants' argument concerning the 600-micron embossed layer (page 9-10) is moot in view of this notice.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien T. Mai whose telephone number is 571-272-8283. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve S. Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thien T Mai
Examiner
Art Unit 2887

TM

January 08

SEUNG HO LEE
PRIMARY EXAMINER